


PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference Hi-bu 031515wo		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA416)	
International application No. PCT/US02/35310	International filing date (day/month/year) 04.11.2002	Priority date (day/month/year) 17.12.2001	
International Patent Classification (IPC) or both national classification and IPC C09J702			
Applicant 3M INNOVATIVE PROPERTIES COMPANY			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 68.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 15.07.2003		Date of completion of this report 18.09.2003	
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer Schlicke, B Telephone No. +31 70 340-1013	



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**International application No. **PCT/US02/35310****I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-14 as originally filed

Claims, Numbers

1-12 as originally filed

Drawings, Sheets

1-4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-12
	No: Claims	
Inventive step (IS)	Yes: Claims	1-12
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

2. Citations and explanations

see separate sheet

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EXAMINATION REPORT - SEPARATE SHEET**Re Item V**

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The present application is directed to a reinforced tape comprising the following layers (in this sequence): a) a visually transparent backing layer of polymeric material, b) a reinforcing scrim being formed of fibers, and c) a visually transparent adhesive layer covering said reinforcing scrim with only portions of said reinforcing scrim being wetted by the adhesive. The polymeric fibers and the transparent adhesives having similar indexes of refraction.

Reference is made to the following documents:

D1: US-A-3179552 (MINNESOTA MINING & MANUFACTURING), 20.04.1965

D2: WO-A-0183632 (MILLIKEN EUROPE), 08.11.2001

D3: EP-A-528563 (MILLIKEN RESEARCH CORP), 22.09.1993

1. Article 33(2) PCT

1.1. Documents D1 (fig. 2; col. 5; line 27-34) discloses a reinforced tape comprising the following layers in this order: a) an optionally clear polymeric duplex film, b) a continuous reinforcing scrim being formed of fibers, and c) an adhesive layer covering said reinforcing scrim. The adhesive coating is continuous and the disclosure remains silent regarding to the refraction indices of the polymeric fibers and the adhesive.

Hence, the subject-matter of claim 1 is novel in view of this teaching.

1.2. Document D2 (claims 1,2,15,16) discloses a reinforced tape comprising the following layers in this order: a) an olefinic film, b) a continuous reinforcing layer in form of a woven fabric, and c) an adhesive layer covering said reinforcing scrim. The adhesive coating is continuous and the disclosure remains silent regarding to transparency of the layers and the refraction indices of the polymeric fibers and the adhesive.

Hence, the subject-matter of claim 1 is novel in view of this teaching.

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EXAMINATION REPORT - SEPARATE SHEET

1.3. Document D3 discloses a reinforced tape comprising the following layers in this order: a) polyethylene film, b) a continuous reinforcing scrim being formed of polyester warp yarns and fiberglass weft yarns, and c) an adhesive layer covering said reinforcing scrim. The adhesive coating is continuous and the disclosure remains silent regarding to the refraction indices of the polymeric fibers and the adhesive.

Hence, the subject-matter of claim 1 is novel in view of this teaching.

2. Inventive Step

2.1. Document D1, which is considered to represent the most relevant state of the art, discloses (cf. 1.1.) a tape from which the subject-matter of claim 1 differs in that the adhesive coating is discontinuous and the refraction indices of the polymeric fibers and the adhesive is explicitly required to be similar.

2.2. The technical effect resulting from these distinguishing features can be seen in that the scrim is visible in the non-use state and non-visible in the used state.

2.3. Hence, the problem to be solved by the present invention may be regarded to provide a reinforced tape having an attractive appearance after its application.

2.4. The available prior art gives no incentive to solve the problem posed as suggested by the present application. Since the solution is also not obvious, the subject-matter of claim 1 is considered to involve an inventive step.

3. Article 33(4) PCT

The subject-matter of all claims is industrial applicable in the sense of Article 33(4).